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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,278	09/13/2005	Tsutomu Reiba	277751US0PCT	2455

  

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.		
1940 DUKE STREET		
ALEXANDRIA, VA 22314		

  

EXAMINER	
WEDDLE, ALEXANDER MARION	

  

ART UNIT	PAPER NUMBER
1792	

  

NOTIFICATION DATE	DELIVERY MODE
10/06/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/549,278	<b>Applicant(s)</b> REIBA ET AL.	
	<b>Examiner</b> ALEXANDER WEDDLE	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/08/2005; 07/24/2006</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 11 improperly depends from a cancelled Claim 3. For examination, Examiner will consider Applicant intended Claim 11 to depend from Claim 10.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 10 and 11 are rejected as vague or indefinite because neither the claims nor the specification clearly define the limitations "A<sup>1</sup> to A<sup>4</sup> comprise an alkylene group, a carboimido group, and an ester group as formed from A<sup>1</sup> and A<sup>2</sup>, A<sup>1</sup> and A<sup>3</sup>, or A<sup>2</sup> and A<sup>4</sup>" or "B<sup>1</sup> to B<sup>4</sup> comprise an alkylene group formed from B<sup>1</sup> and B<sup>3</sup>, or B<sup>2</sup> and B<sup>4</sup>," and a person of ordinary skill in the art would not understand what the applicant is claiming. Because the specific examples of Applicant's definitions do not demonstrate what these recitations mean, Examiner has construed the Claims as follows:

The specification discloses that the structural unit (a) is represented by formula

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(1-1), which is further defined in paragraph 13 – language identical to that of Claim 10. Furthermore, A<sup>1</sup> to A<sup>4</sup> in formula (3) are the same as in the definitions of formula (1-1) (par. 0015). Specific examples of (1), represented by the formula (3), include bicyclo[2.2.1]hept-2-ene (par. 0017); therefore, Examiner construes Claim 10 to include a cyclic olefin with groups A<sup>1</sup> to A<sup>4</sup> which are all hydrogen atoms (or all halogen atoms, alkyl groups, etc.), and which does not have an alkylene group, carboimido group, or ester group. Analogously, examiner construes Claim 11 to include a cyclic olefin in which 3 of the 4 groups B<sup>1</sup> to B<sup>4</sup> are hydrogen atoms (or halogen atoms, alkyl groups, etc.) and the remaining group must be a hydrolyzable silane without an alkylene group (pars. 0080-0084).

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Oshima et al. (US 6,639,021 B2).

Regarding Claim 9, Oshima et al. ('021) teach a method for treatment of a film by bringing a film containing a cyclic olefin-based polymer having a sulfonic group into contact with superheated steam (col. 19, lines 33-35 and 46-49; col. 12, lines 7-12 and 20-22; col. 23, lines 37-39).

Regarding Claim 10, Oshima et al. teach that the cyclic olefin-based polymer, which the film contains, comprises a recurring unit represented by formula (2), wherein  $B^1$  to  $B^4$  – which correspond to  $A^1$  to  $A^4$  in the Application --- independently, or individually, represent a hydrogen atom, a halogen atom, an alkyl group, aryl group, etc. and n (Application's "p") is an integer from 0-2 (col. 3, lines 31-58).

Regarding Claim 11 (see Claim Objections, above), Oshima et al. teach that the cyclic olefin-based polymer, which the film contains, comprises a recurring unit represented by formula (1), wherein  $A^1$  to  $A^4$  – which correspond to  $B^1$  to  $B^4$  in the Application --- independently, or individually, represent a hydrogen atom, a hydrocarbon group (e.g., an alkyl group), having 1 to 20 carbons, or a hydrolyzable silyl group (e.g., alkoxysilyl), etc.; at least one of  $A^1$  to  $A^4$  represents a hydrolyzable silyl group; and m (Applicant's "q") is 0 or 1 (col. 3, lines 4-31).

Regarding Claim 12, Oshima et al. teach a method for treatment of a film or sheet using the cyclic olefin based polymer of Claim 11 where a compound capable of generating an acid at the treatment temperature is used simultaneously (col. 3, lines 5-32 and lines 59-60; col. 4, lines 13-14; col. 12, lines 7-10 and lines 25-30 ).

Regarding Claim 13, Oshima et al. teach treating the film or sheet according to Claim 9 with superheated water vapor (i.e. superheated steam), for example steam at 150 °C and 1 atm (col. 23, lines 37-39) or steam up to 300 °C (col. 12, lines 25-30).

Thus all limitations of Claims 9-13 are taught ; therefore Claims 9-13 are anticipated.

***Conclusion***

7. No Claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER WEDDLE whose telephone number is (571) 270-5346. The examiner can normally be reached on Monday-Thursday, 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on (571)272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. W./  
Examiner, Art Unit 1792  
/Michael Kornakov/

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Supervisory Patent Examiner, Art Unit 1792